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# *The Impact of Parental Incarceration on Children's Health & Development*

## **Summary**

- The incarceration boom in the United States has resulted in high rates of parents serving time in jails and prisons.
- Prevalence of children experiencing parental incarceration in 2016 was estimated at 10.4% in Indiana and 8.2% nationally.
- Though incarceration is often treated as a discrete event, it is important to note that the time period extends both prior to and beyond the incarcerated phase (pre- and post-incarceration).
- Evidence on the relationship between parental incarceration and children's health outcomes is inconsistent across the literature and often disappears when controlling for demographic and family characteristics. Summarized findings include:
  - There may be some relationship between parental incarceration and substance use; however, if or when substance use manifests and for which substances is not clear.
  - There appears to be mixed evidence surrounding mental health outcomes of children who have experienced parental incarceration.
  - There does not seem to be strong evidence linking attention problems to parental incarceration. However, the evidence linking behavioral problems and antisocial behaviors to incarceration of the mother or father is more consistent.
  - There appears to be evidence suggesting a relationship between parental incarceration and developmental delays; though findings on its effect on academic achievement were mixed.
  - The evidence linking parental incarceration to physical health outcomes is mixed.
  - The evidence linking parental incarceration to the child's future incarceration is consistent and strong.
- While it is not clear if there is a causal relationship between parental incarceration and children's health and development, this population is at high risk for adverse outcomes and should be the target of interventions.

## Background

U.S. incarceration rates have risen significantly since the 1970's, causing the United States to have higher rates of incarceration compared to Western European countries.<sup>1</sup> From 1978 to 2016, the rate of incarcerated adults increased nearly threefold, from less than 200 per 100,000 to 582 per 100,000.<sup>2</sup> Incarceration not only affects individuals, but considerably impacts families. In 2007, over half of all state and federal inmates were parents.<sup>3</sup>



A study of children born in 1990 found that 1 in 25 white children and 1 in 4 black children would experience parental incarceration by the time they turn 14.<sup>4</sup> Furthermore, nearly 13% of adolescents had experienced some type of parental incarceration; mostly that of the father (10%). However, some of these cases involved the incarceration of the mother (2%) or of both parents (1%).<sup>5</sup> The parental incarceration risk is disproportionately higher among black families and those with lower educational attainment.<sup>4</sup>

Children of incarcerated parents are often referred to as the “invisible” or “forgotten” population as the consequences of the incarceration boom on children are often not considered.<sup>6-8</sup> A focus on these ‘collateral consequences’<sup>9</sup> on the children of the incarcerated has now become well-explored in the literature. This issue brief will explore the circumstances surrounding incarceration; the theories used to understand incarceration; current evidence on the consequences of parental incarceration on children; and implications for policy and practice.

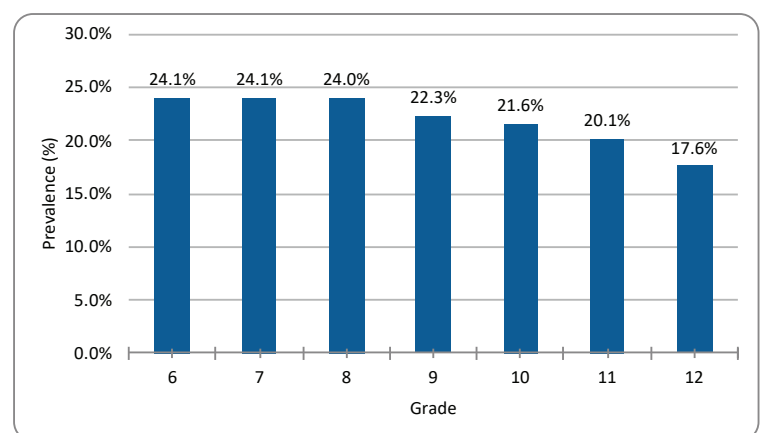
## Prevalence of Parental Incarceration in Indiana

According to estimates from the 2018 Indiana Youth Survey (INYS), which is administered to school children in grades 6 through 12, approximately 1 in 5 Indiana students have had a parent serve time in jail (Figure 1).

Findings from the 2016 National Survey of Children's Health (NSCH) suggest lower rates, with 10% of Indiana children ages 0 to 17 having experienced parental incarceration compared to 8% nationally. This survey also found higher rates among children from families with lower income (Figures 2a & 2b).

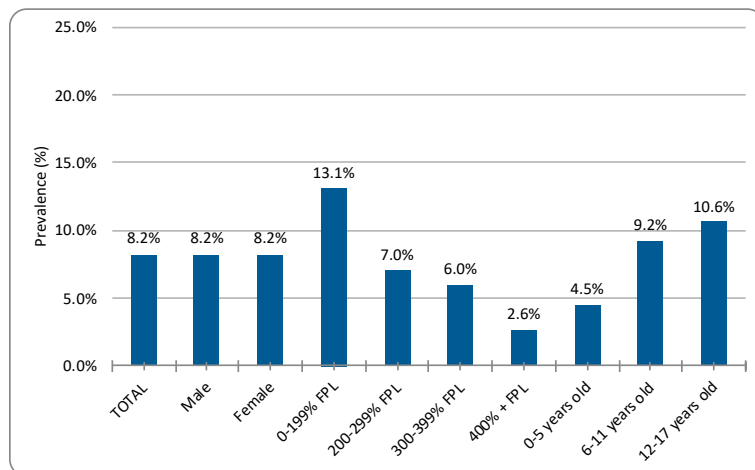
Differences in prevalence rates across the INYS and MSCH surveys may be attributable to survey administration. The INYS is administered directly to students in grades 6 through 12, therefore, mostly representing children between the ages of 11 and 18. The NSCH, on the other hand, is generally answered by a parent or guardian concerning children aged 0 to 17; furthermore, parents may feel ashamed and potentially not answer this

**Figure 1.** Prevalence of Children Experiencing Parental Incarceration in Indiana by Grade Level.



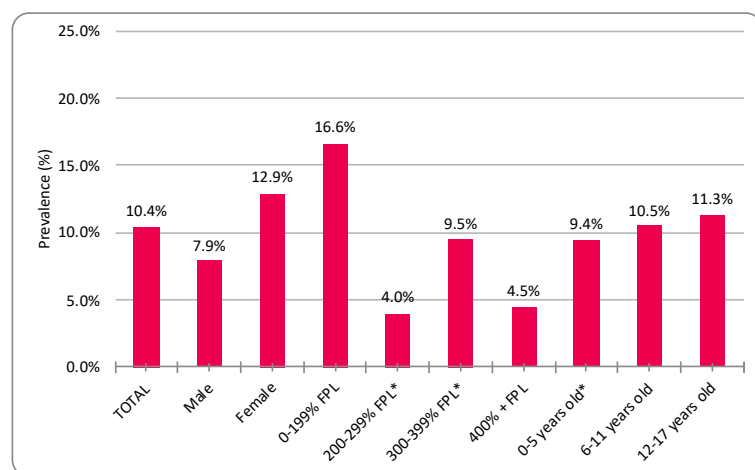
Source: Indiana Youth Survey, 2018.

**Figure 2a.** US Prevalence of Children Experiencing Parental Incarceration by Demographic Characteristics.



Source: National Survey of Children's Health, 2016.

**Figure 2b.** Indiana Prevalence of Children Experiencing Parental Incarceration by Demographic Characteristics.



Source: National Survey of Children's Health, 2016.

\*Indicates the 95% confidence interval width for the Indiana rate is greater than 20 percentage points or 1.2 times the estimate. These estimates may not be reliable and should be interpreted with caution.

question truthfully. These data also were derived from different collection years; i.e., INYS was administered in 2018 and the NSCH was collected in 2016.

## Complexity of Parental Incarceration

When describing relationships between parental incarceration and children's outcomes it is important to consider the heterogeneity of situations surrounding incarceration. In many studies, incarceration is treated as a discrete event, however it extends both prior to and beyond the incarcerated period and all incarcerations are not the same.<sup>10</sup> The many factors surrounding incarceration have been described as the "chain of adversity," in which the difficulties in the lives of the child and their family continue to multiply.<sup>9,11</sup> Discussions around this vulnerable population identify several important characteristics and times for children surrounding parental incarceration.

## Pre-Incarceration

Oftentimes the parental behavior that leads to incarceration has been ongoing for some period of time beforehand.<sup>12</sup> More specifically, this period may include poverty, parental substance use and mental health problems.<sup>12</sup> This situation can be stressful or even dangerous. Children's relationships with their parents may vary during this time period and may depend on which parent is eventually incarcerated. Finally, the age of the child during this time may also affect their experience.

There are differences in family structure, living situations, socioeconomic status, and other adverse experiences for children who face parental incarceration. On average, these children generally come from low-income areas and may live with a single parent. In two qualitative studies of incarcerated mothers, many reported that their child had been exposed to parental alcohol or drug use, physical or sexual abuse, and frequent moves prior to the mother's incarceration.<sup>13,14</sup> The body of evidence surrounding adverse childhood experiences (ACEs) supports this claim in that



ACEs often occur in clusters.<sup>15</sup> In other words, most individuals that have experienced one category of ACE, such as incarceration, have also experienced others such as physical or sexual abuse, parental separation or divorce, witnessing domestic violence, or parental substance use.

### Incarceration

Many changes often occur in the child's life *during* parental incarceration, including a decrease in household income and changes in living situations, such as moving or living with a different parent, relative, or guardian. For example, children with incarcerated mothers are more likely to either live in foster care or with somebody other than a parent compared to children with incarcerated fathers.<sup>16</sup> While many families experienced economic hardship already prior to incarceration, the majority reported being financially worse off now compared to before the family member's incarceration.<sup>17</sup>



Visiting an incarcerated parent is often emotionally and logistically difficult and may not occur very often. This often adds to an already strained relationship and may lead to separation anxiety in children.<sup>11,17,18</sup> In other situations, children may be shielded from their parent's incarceration by their caretaker or feel shame or embarrassment.<sup>10,19</sup> These intermediate changes between incarceration and future outcomes for the children may be mediators of this relationship.<sup>19</sup>

### Post-Incarceration

After incarceration, most parents intend to return to living with their children;<sup>20</sup> however, many changes are likely to have occurred during their absence making it difficult for both parent and child to adjust. There often have been changes in lifestyles, the child has aged, and there may be additional economic difficulties as the parent seeks employment.

This 'chain of adversities' and the context surrounding parental incarceration make for a complex and dynamic environment for the child. When studying parental incarceration, it is crucial to consider these aspects of the phenomenon. In order to support this consideration, researchers often rely on theoretical frameworks to study this relationship.

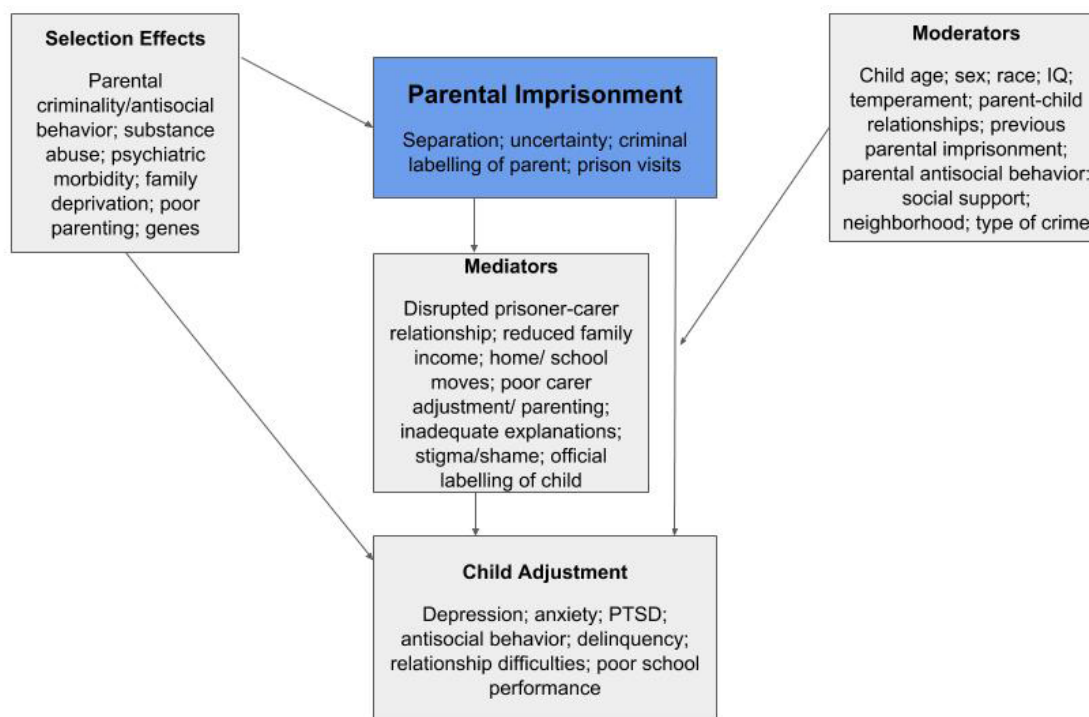
### Theoretical Relationship between Parental Incarceration & Future Child Outcomes

Experts view the potential relationship between parental incarceration and children's health and behaviors from a variety of perspectives and draw from many disciplines including biology, sociology, psychology, and others to explain these relationships.<sup>20</sup> For example, the stress process theory and stress proliferation suggest that as parents experience stressors in their life, such as incarceration, this will also affect their children. Through familial economic hardship, changes in caregiving procedures, relationship dissolution, and neglectful parenting, children's physical, behavioral, and social health as well as academic achievement may be affected by parental incarceration. In addition to this theory, there are many others that attempt to describe this relationship.<sup>8,10,11,20,21</sup> All of these theories provide explanations for why parental incarceration *may* have a causal relationship to future child outcomes and many of these models are used as the foundation of this research.

Based on the early evidence, Murray and colleagues created a model to describe the



**Figure 3.** Causal Diagram of Parental Imprisonment Developed by Murray & Colleagues



complex context around parental incarceration as a guide for research.<sup>19</sup> Part of the purpose of this model is to support research in considering the important factors and contexts in the child's life and to address the common assumption that parental incarceration is causally related to a child's outcomes. Their model includes five factors: selection effects, parental imprisonment, moderators, mediators, and outcomes (Figure 3). Selection effects include the baseline socioeconomic, demographic, historical, and genetic factors present prior to incarceration. These can not only be related to parental incarceration but also to the child's outcomes, here called 'child adjustment,' such as mental health and academic performance. Parental imprisonment includes actual incarceration as well as the separation, visitation, and stigma associated with the time while the parent is incarcerated. Moderators are

factors that may affect the strength or direction of the relationship between parental imprisonment and child adjustment. These identify the factors that may affect how likely a particular outcome may be. In discussions of parental incarceration, many suggest that the child's age at time of incarceration or whether they are exposed to maternal or paternal incarceration may matter. Mediators are the factors that lie between parental imprisonment and child adjustment in the causal model. These often include the changes associated with incarceration such as changes in living situations or family income. Ultimately, all of these factors feed into the child adjustment of outcomes later in life.

Because of this complex mechanism, many studies include many of these variables as control variables in a model, look for comparable control groups, test for mediation and/or moderation, or use other



statistical techniques to attempt to get closer to causal inference.

### **Associations between Parental Incarceration & Children's Outcomes Substance Use**

The evidence on the relationship between parental incarceration and substance use is mixed. In two literature reviews by Murray and colleagues, there is little evidence of an association between parental incarceration and substance use.<sup>8,22</sup> In their own study using data from the longitudinal Cambridge Study of boys born in London in 1953, Murray and colleagues found that parental incarceration was not generally associated with drinking habits, but was linked to drug use in adulthood.<sup>8</sup> Another study found no association between *parental incarceration* and alcohol or tobacco use after controlling for demographic and family characteristics; however, *parental arrest* was associated with a child's alcohol and tobacco use, suggesting that it may not be incarceration driving trends in substance use.<sup>23</sup>

Two studies on marijuana use also provided conflicting results. While one study did not find an association between parental incarceration and marijuana use,<sup>21</sup> the other study linked parental incarceration to marijuana and other illegal drug use in young adulthood.<sup>24</sup>

**There may be some relationship between parental incarceration and substance use; however, if or when substance use manifests and for which substances is not clear.**

### **Mental Health**

The most recent systematic review did not find an elevated risk of mental health problems for children of incarcerated parents;<sup>22</sup> however, other studies provided conflicting results. Some studies did not find a higher risk of depression among children who experienced parental incarceration,<sup>21,25</sup> or only before controlling for family, socioeconomic, and demographic factors.<sup>26</sup> Other studies found that

odds of depression are greater for children who experience parental incarceration;<sup>5,25</sup> sometimes the risk of depression extending into adulthood.<sup>8</sup>

According to the literature, symptoms of anxiety and depression as reported by caregivers remained significantly greater for children of incarcerated parents even after accounting for other adverse experiences for that child,<sup>27</sup> and post-traumatic stress disorder and anxiety was linked to paternal but not maternal incarceration.<sup>5</sup>

**There appears to be mixed evidence surrounding mental health outcomes of children who have experienced parental incarceration.**

### **Attention & Behavior problems**

Attention problems including Attention Deficit Disorder (ADD) and Attention Deficit and Hyperactivity Disorder (ADHD) have also been common subjects in the literature. Studies of general attention problem appear to show little effect.<sup>27,28</sup> When considering ADD/ADHD specifically, one study found that neither maternal nor paternal incarceration were associated with ADHD in young adulthood<sup>5</sup> while another found a greater risk of ADD/ADHD and behavioral or conduct problems even after controlling for family, demographic, and socioeconomic factors.<sup>26</sup>

Parental incarceration has been linked to behavioral problems<sup>25</sup> and aggressive behaviors.<sup>28</sup> Children of incarcerated parents are more likely to exhibit antisocial behaviors<sup>8,22</sup> and experience problems with emotional self-regulation, even after accounting for other negative life experiences.<sup>27</sup>

**There does not seem to be strong evidence linking attention problems to parental incarceration. However, the evidence linking behavioral problems and antisocial behaviors to incarceration of the mother or father is more consistent.**



## Developmental, Cognitive, and Academic Performance

Perhaps the most well-studied aspect of parental incarceration is on childhood cognitive development and academic performance. Generally, parental incarceration has been associated with greater odds of developmental delays. After adjusting for family, demographic, and socioeconomic factors, studies have found greater odds for learning disabilities and developmental delays<sup>26</sup> as well as lower physical, social, emotional, and cognitive development.<sup>29</sup> Some studies, though not all,<sup>28</sup> found that children of incarcerated parents were more likely to experience speech or language problems.<sup>26,27,29</sup>

Similarly, results regarding academic achievement show heterogeneity. Some studies found a significant relationship between parental incarceration and lower educational attainment<sup>7,20</sup> as well as greater odds of truancy;<sup>7</sup> while others were not able to detect an effect of parental incarceration on academic performance.<sup>21,22,26</sup>

**There appears to be evidence suggesting a relationship between parental incarceration and developmental delays; though findings on the effect on academic achievement were mixed.**

### Physical Health

In a qualitative study, 27% of caregivers reported a decline in the child's health since incarceration of the relative.<sup>17</sup> In another study, nearly half of the mothers reported their child having serious or chronic physical health problems prior to incarceration, but 14% of the physical and mental health conditions were reported to have worsened during incarceration; though researchers caution that these are likely conservative estimates.<sup>13</sup>

Two rigorous, quantitative studies have seen no effect of incarceration on specific aspects of a child's health after controlling for baseline characteristics.<sup>26,28</sup> Another study found paternal incarceration to be associated with increased

odds of asthma, migraines, and overall fair/poor health, but not with high cholesterol, hypertension, diabetes, heart disease, epilepsy, hepatitis, or obesity in young adulthood.<sup>5</sup> That same study found no differences in physical health for children that experienced maternal incarceration but lower odds of obesity in young adulthood for those having experienced both parents being incarcerated.<sup>5</sup>

**The evidence linking parental incarceration to physical health outcomes is mixed.**

### Future Incarceration

Parental incarceration is consistently associated with future incarceration of the child.<sup>8,16,30–32</sup> In two of these studies, maternal incarceration was associated with even greater odds of future incarceration, compared to paternal incarceration.<sup>16,32</sup>

**The evidence linking parental incarceration to the child's future incarceration is consistent and strong.**

## Summary of the Evidence

Throughout the literature inconsistencies in research findings about the relationship between parental incarceration and children's health and other outcomes remain.<sup>7,12,33</sup> While many studies found an increased prevalence of problems among children of incarcerated parents, there are numerous studies that did not find an effect, especially after controlling for pre-incarceration family and socioeconomic conditions. It is difficult to assess if there is a causal relationship between parental incarceration and specific outcomes. Differences in findings across studies may be, at least in part, because of differences in study design, baseline exposures, and use of control groups.

Several studies emphasized that many of these associations likely stem from pre-incarceration criminal behavior and risk factors; i.e., factors that were present even before the parent was incarcerated.<sup>10,18</sup> In addition, the changes that

may occur during parental incarceration including economic instability, relocations, parental separation or divorce, and feelings of shame, may be driving the outcomes. The combination of risk factors both before and during incarceration creates a complex environment of stressors for children.<sup>19</sup>

In a few studies, associations between parental incarceration and various outcomes are significant *until* familial characteristics are included as controls in the analyses.<sup>23,25,26</sup> This suggests that while there are significant differences such outcomes between children who have experienced parental incarceration than those without, once you keep familial characteristics constant across the two groups, these differences are no longer seen. In a small study of <sup>44</sup> incarcerated women, 92% of their children were already experiencing at least one of the many outcomes considered in other studies including mental or physical health problems, substance use, and delinquency and 72% of the problems seen among the children of these incarcerated women were actually present prior to incarceration.<sup>14</sup>

### Addressing Parental Incarceration: Evidence from the Literature

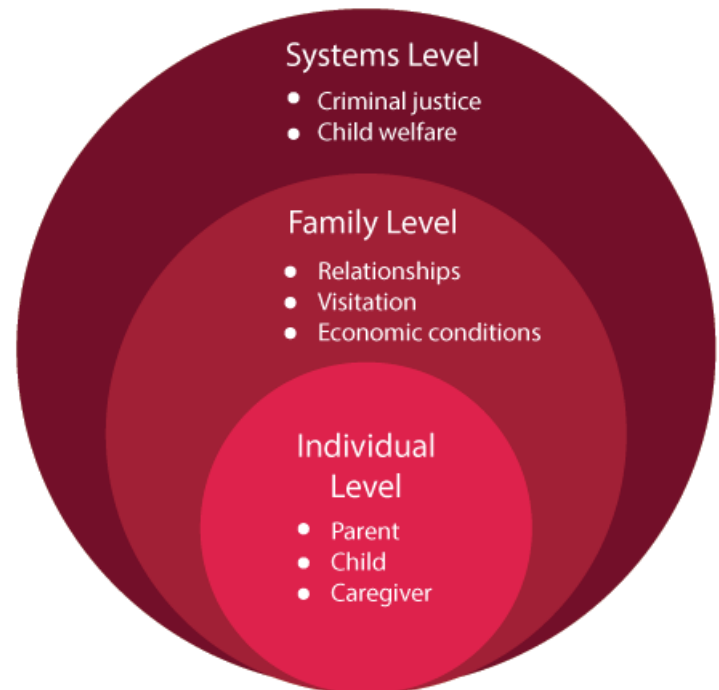
Whether or not parental incarceration is the causal driver, it has been well-established that children who experience incarceration of their mother or father are disproportionately affected by negative outcomes. Thus, even if the causal relationship is not clear, efforts to support this vulnerable population are warranted. Many efforts, proposed and conducted, have been made to support parents, children, and caregivers in a variety of ways and provide opportunities to develop interventions and prevention efforts (Figure 4).

Much of the dialogue regarding parental incarceration includes suggestions as well as current efforts to address this population. Because of the complex nature of parental incarceration, there are many targets of interventions. The

dimensions of these approaches include

- who should be targeted,
- what should be targeted, and
- how should the intervention be conducted?

**Figure 4.** Levels and targets for intervention.



Methods can vary and may focus on the child, incarcerated parent, caregiver, relationships, or involve higher, system-level approaches. For the child, it is suggested to focus on his or her feelings of isolation, mentorship, behavioral problems, anger and conflict management, goal setting, communication, and consequences of substance use.<sup>17,35–37</sup> Some suggest that interventions should target the most vulnerable children which often involves those with the largest difference in lifestyle from pre-incarceration to incarceration. While this may seem counter intuitive because it generally targets those with the least challenges before incarceration, this represents an abrupt and substantial change to the lives of those children.<sup>35</sup>

For the incarcerated parent, parenting classes are a popular effort.<sup>36,38,39</sup> Classes may be either with or





without child involvement and include topics such as self-esteem, corporal punishment, and family roles.<sup>38,39</sup> Another suggestion may be to prevent parental incarceration in the first place. This is a valid place for intervention but may include specific interventions depending on the parental criminal behavior. However, evidence-based practices are often developed for these types of interventions, i.e. those for parental problem drug use.<sup>34</sup>

Caregiver supports often include training on communication, developmental expectations, effective discipline, stress management, problem solving, limit setting, and alcohol and drug abuse awareness.<sup>36</sup> There is also the need for support of the caregiver on managing behavioral problems for the child, needing information about the incarcerated individual's sentence, awareness of relevant support and policies, and even a break from caregiving.<sup>37</sup> This notion of the caregiver being overwhelmed has been echoed by others as well.<sup>35</sup>

One of the most common suggestion is to support and cultivate the incarcerated parent-child or overall family relationship.<sup>10,11,17,38,40</sup> This includes increasing access and frequency to visitation or communication via subsidized transportation or lodging, shared housing for when children are visiting, or special visitation space for families.<sup>10,11,38,40</sup> On-site efforts to support the parent-child relationship are also encouraged.<sup>17</sup> Other relationship-supporting suggestions include allowing the parent to be involved in child placement and care decisions and to maintain family support after incarceration.<sup>40</sup> Finally, another important measure is to help support the family economically, since this time period can result in financial changes and distress. This may include general support, housing, transportation, and subsidizing visit costs.<sup>17,37,38</sup>

The last set of suggestions includes systems-level changes. Reflective of describing the children of incarcerated parents as an 'invisible' population in the prison boom, it has been suggested to use

incarceration as a last resort for parents, especially for non-violent offenses.<sup>10,17</sup> This may be in the form of community-based sentencing such as house arrest, halfway houses, or day programs.<sup>10</sup> In a similar vein, there has also been support since the late 1990's for integrating criminal justice and child welfare.<sup>37,40</sup> This may be logical because their populations overlap and both have limited resources, however this integration is not without barriers. Getting cooperation and sharing information poses challenges, and facilities and training are limited.<sup>40</sup>



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The mission of the Center for Health Policy is to conduct research on critical health-related issues and translate data into evidence-based policy recommendations to improve community health. The CHP faculty and staff collaborate with public and private partners to conduct quality data driven program evaluation and applied research analysis on relevant public health issues. The Center serves as a bridge between academic health researchers and federal, state, and local government as well as healthcare and community organizations.

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